

ABSTRACT OF THE DISCLOSURE

An electric-field meter provided with a housing, an electrode assembly, a shield assembly, a movement assembly, a position detection assembly, a charge measurement circuit, and a leakage current compensation circuit. The electric-field meter can be characterized as a field mill, an induction voltmeter, an electrostatic fluxmeter or an agrimeter. The electrode assembly is selectively exposed to the electric field. The shield assembly alternately covers and exposes the electrode assembly to the electric field. The movement assembly has a source of motive force and a linkage operably connected to one of the shield assembly and the electrode assembly for alternately covering and exposing the electrode assembly to the electric field. The charge measurement circuit receives charge on the electrode assembly. The charge measurement circuit provides a charge detection signal indicative of the charge induced on the electrode assembly as the electrode assembly is selectively exposed to the electric field. A current compensation circuit is provided for offsetting an average leakage current at the input of the charge measurement circuit.